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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,525	11/21/2003	Raymond A. Milio	60,130-1926/00MRA0585	3378
26096	7590	05/09/2005	EXAMINER	
CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD SUITE 350 BIRMINGHAM, MI 48009			SY, MARIANO ONG	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/719,525

Applicant(s)

MILIO ET AL.

Examiner

Mariano Sy

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,8,9 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) 5-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,8,9 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed on March 9, 2005 has been received.
2. The amendments to the drawing filed on March 9, 2005 was not properly identified in the top margin not as "Proposed Replacement Sheet" but should be as "Replacement Sheet" as required by 37 CFR 1.121 (d).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishibashi et al. (JP-8-67108).

Re-claims 1 and 2 Ishibashi et al. disclosed, as shown in fig. 1-5, an axle comprising: an axle housing 2 including a surface; a cover 12 having generally dome-shaped portion having a first thickness, said dome-shaped portion terminating in a perimeter edge having a second thickness greater than said first thickness, said perimeter edge including a height extending from said surface (start of curvature of radius toward the surface of item "2") greater than said first thickness, wherein said perimeter edge provides a weld surface; and a weld bead securing said perimeter edge

Art Unit: 3683

to said axle housing; wherein said second thickness is up to approximately twice said first thickness.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishibashi et al. in view of Pringle (U.S. Patent Number 4,234,120).

Re-claims 3 and 4 Ishibashi et al. fails to disclose wherein said dome-shaped portion includes a plurality of reinforcing ribs protrude and arrange radially about said dome-shaped portion.

Pringle teaches, as shown in fig. 1-2, reinforcing ribs 50 protrude and arrange radially about axle cover 13, see col. 3, lines 43-46.

It would have been obvious to one of ordinary skill in the art to have merely utilized the known reinforcing ribs into the axle housing cover of Ishibashi et al., in view of the teaching of Pringle, in order to add strength and support to the cover.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ishibashi et al. in view of Jones (U.S. Patent Number 3,715,936).

Re-claim 8 Ishibashi et al. failed to disclose a recessed boss with an opening.

Art Unit: 3683

Jones discloses, as shown in fig. 1, an axle cover 3 having a recessed boss with an opening.

In the amendment to the specification par. [21] by applicant "that the carrier assembly 27 installed on the boss 26 is known arrangement in the art". Therefore to mount the carrier assembly on the boss will be a matter of design choice. It would have been obvious to one of ordinary skill in the art to modify the cover of Ishibashi et al. having a recessed boss with an opening, as taught by Jones, by mounting the carrier assembly on the well known alternative location on the recessed boss of the cover.

8. Claims 9 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishibashi et al. (JP-8-67108) in view of Metals Handbook, 8th Edition, Welding and Brazing, page 270, fig. 27.

Reclaims 9 and 18 Ishibashi et al. discloses, as shown in fig. 1-5, an axle housing cover for securing to an axle housing 2 comprising: a generally dome-shaped portion having a first thickness, said dome-shaped portion terminating in a terminal end for engaging axle housing, said dome-shaped portion including an outer perimeter edge adjacent to said terminal end and having a second thickness different than said first thickness and the outer perimeter edge for receiving a weld bead securing the cover to the axle housing.

However Ishibashi et al. fails to disclose said outer perimeter edge lying within a boundary tangential to said dome-shaped portion immediately adjacent to said outer perimeter edge.

Art Unit: 3683

Metals Handbook, page 270, fig. 27 teaches a hemisphere having an outer perimeter edge lying within a boundary tangential to dome-shaped portion immediately adjacent to said outer perimeter edge, wherein the outer perimeter edge can provide a weld surface.

One of ordinary skill in the art would modify the cover Ishibashi et al., as taught by Metals Handbook, page 270, fig. 27, is a matter of design choice and an alternate equivalent of a known terminal end of a dome-shaped cover depending upon space for welding the cover to the axle housing in order to strengthen the welded joint.

Reclaim 19 Ishibashi et al. discloses, as shown in fig. 1-5, an axle housing cover comprising: a generally dome-shaped portion having a first thickness, said dome-shaped portion terminating in a terminal end for engaging axle housing, said dome-shaped portion including an outer perimeter edge adjacent to said terminal end and having a second thickness different than said first thickness, said perimeter edge for receiving a weld bead securing the cover to the axle housing.

However Ishibashi et al. fails to disclose said outer perimeter edge adjacent to the terminal end without extending radially outwardly from said dome-shaped portion.

Metals Handbook, page 270, fig. 27, teaches a hemisphere having an outer perimeter edge adjacent to a terminal end extending radially inwardly from the dome-shaped portion and a terminal end thickness greater than the thickness of the dome-shaped wall wherein the outer perimeter edge can provide a weld surface.

Art Unit: 3683

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the terminal end by extending radially inwardly instead of radially outwardly in view of the teaching of Metals Handbook, page 270, fig. 27, in order to strengthen the welded joint for thicker welds. Since it had been held that a mere reversal of the essential parts of a device involves routine skill in the art. In re Einstein, 8 USPQ 167.

Reclaim 20 Ishibashi et al. discloses, as shown in fig. 1-5, wherein the second thickness is greater than said first thickness, said second thickness having a height (start of curvature of radius toward the surface of item "2") greater than said first thickness.

9. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Examiner maintains the rejections are proper.

Regarding claim 1 applicant argued that Ishibashi does not read on the amended claim 1. Ishibashi disclosed, as shown in fig. 3 and 5, still reads on amended claim 1 as a perimeter edge (shown as the flange sitting on surface of housing 2) of the cover 12 including a height extending from said surface and in a direction away from said surface, said height greater than said first thickness.

Regarding claim 2, Ishibashi still reads on the claim wherein said second thickness is up to approximately twice said first thickness. Applicant in the specification,

page 4, par. [18], lines 6-9 disclosed "Preferably, the second thickness Y is greater than that of the first thickness X ---- in a range of approximately 8 to 16 millimeters".

Regarding claim 8 applicant argued that "First, the element of Jones is not a carrier ----- Second, Ishibashi does not need an access port as the element 17 and its associated carrier may be removed to provide access". In the amendment to the specification par. [21] by applicant "that the carrier assembly 27 installed on the boss 26 is known arrangement in the art". Therefore to mount the carrier assembly on the boss will be a matter of design choice. It would have been obvious to one of ordinary skill in the art to modify the cover of Ishibashi et al. having a recessed boss with an opening, as taught by Jones, by mounting the carrier assembly on the well known alternative location on the recessed boss of the cover.

Regarding claims 18 and 19 Ishibashi disclosed the terminal end, extending radially outwardly, that is thicker than the wall thickness of the dome-shaped cover. Metals Handbook, page 270, fig. 27 teaches the terminal end, extending radially inwardly, that is thicker than the wall thickness of the dome-shaped cover. Since both arts teaches welded joints for terminal ends of a dome-shaped cover except for the direction of the increased thickness of the terminal end either radially inwardly or radially outwardly with respect to the wall of the dome-shaped cover. It would have been obvious to one of ordinary skill in the art to modify the dome-shaped cover of Ishibashi, as taught by Metals Handbook, page 270, fig. 27, as a matter of design choice for the welded joint of the known terminal end of the dome-shaped cover with the same intended function of providing a strong welded joint.

Art Unit: 3683

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariano Sy whose telephone number is 571-272-7126. The examiner can normally be reached on Mon.-Fri. from 8:30 A.M. to 2:30 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci, can be reached on 571-272-7099. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 3683

Status information for unpublished applications is available through Private PAIR only.


For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

 M. Sy

April 26, 2005

 5/2/05
ROBERT A. SICONOLFI
PATENT EXAMINER